in the others. Cases in which carcinoma develops in the site of a simple ulcer may show apparent exceptions to these statements. The fact remains that malignant disease of the stomach with stagnation of the contents is accompanied by products of decomposition different from those in benign cases.

TUBERCULOSIS OF THE ADRENALS WITHOUT BRONZING.

COLEMAN (*Medical Record*, No. 1252, p. 552) has reported the case of a sailor, thirty-six years old, with marked constipation, who died without assignable cause three weeks after coming under observation. There was marked asthenia without apparent reason. The temperature at no time rose above 101° F. The reflexes were exaggerated and sensation was delayed. During the last few days of life delirium appeared. At the post-mortem examination the upper lobe of the right lung contained several tuberculous masses of considerable size in a state of caseation, while throughout the middle and lower lobes a few small nodules were found. The upper lobe of the left lung contained a large area of tuberculous infiltration in a state of caseation. The rest of the upper lobe was studded with miliary tubercles, while the lower contained a few tubercles along the pleura. The bronchial glands were enlarged and cheesy at the centre. The left adrenal body was somewhat distorted, and on section was found to be caseous, greenish-yellow pus exuding from several points on the cut surface. All traces of medulla and cortex had disappeared. At many points calcareous deposits had taken place in the cheesy matter. The right adrenal was reduced in size and contained one large calcareous mass, with numerous smaller ones scattered through its substance. In sections prepared from the glands tubercle-bacilli were found.

ACUTE PANCREATITIS.

At a recent meeting of the Clinical Society of London, PAUL (*Lancet*, No. 3712, p. 914) reported the case of a man, forty-three years old, who was seized with colicky pains in the abdomen, lasting for a few minutes. On the following day there was a recurrence of the pain, with vomiting. The bowels were constipated. The abdomen was slightly distended, but nothing abnormal could be detected by manipulation. The rectum was surcharged with feces. The pulse was 82 per minute and fairly full, and the temperature 100.6° F. An enema was followed by a large, constipated, but otherwise normal stool. An hour and a half later the man was found to be collapsed, with cold, clammy extremities and the radial pulse scarcely perceptible, and death took place eight hours after coming under observation, the temperature rising to 104° just before death. Two drachms of urine had been passed, containing considerable albumin, granular and hyaline casts, but no sugar. At the post-mortem examination the peritoneum covering the pancreas was found to be glued by recent lymph to the posterior surface of the stomach. The pancreas itself was much swollen and the seat of multiple hemorrhages, which were most numerous in the tail. The stomach, duodenum, and remaining organs were healthy, except for a cloudy swelling of the kidneys. There was no fat-necrosis. Microscopical examination of the pancreas disclosed considerable disintegration, with total destruction in parts of the parenchyma of the organ. Numerous hemorrhages were to be seen, as well as clumps of crystals of hematoidin.

FATAL NEPHRITIS FOLLOWING SLIGHT SKIN-WOUNDS.

SACAZE (*Revue de Médecine*, February, 1895) calls attention to the fact that, though we recognize the occurrence of nephritis in the course of the more severe infectious diseases, we are apt to overlook the fact that slight affections, in themselves of little importance, can also be followed by nephritis.

He records the case of a gardener, sixty-five years of age, who, in handling some wood, scratched his hand slightly; he neglected the wounds, and three days later, after local redness, severe chills and œdema appeared. The urine, on admission, showed 3.25 grammes of albumin to the litre. The patient gradually sank, and died with uræmic symptoms one month later, the autopsy showing a nephritis and no other important lesions. Cultures from the skin-wounds during life showed the staphylococcus albus.

From the fact that the patient had been in perfect health before the wounds were inflicted, and that there was local reaction followed by symptoms of general infection and nephritis, Sacaze concludes that the nephritis was due to infection from the skin-wounds. He concludes his paper by remarking that the staphylococci can cause an acute nephritis, and that a slight skin-wound is capable of serving as their port of entry, and can thus present this complication.

EXPLOSIVE URÆMIA DUE TO ABORTIVE RENAL CONGESTION.

FIESSINGER (*Gazette Médicale de Paris*, March 2, 1895) reports two interesting cases of uræmia, of sudden onset and short duration, occurring in two brothers. In the one, a strong, healthy man, forty-two years of age, addicted to occasional alcoholic excesses, sudden unconsciousness with convulsions came on, the only preceding symptoms having been abdominal distress the night previously. The patient had three convulsive attacks in the one morning, was up out of bed the day following, and on the third day was back at work feeling as well as ever. During the attack there was almost complete anuria, and the urine contained albumin and a trace of sugar; two days after the attack it was perfectly normal. The patient remains in perfect health six years after the observation.

The second brother, aged fifty-six years, after having headache and anorexia for forty-eight hours, was suddenly taken with orthopnœa. The patient was cyanotic and wheezy, and had a short, frequent cough, with profuse, ropy, sanguinolent expectoration. The lower portions of both lungs were full of fine subcrepitant râles. The attack occurred at night and lasted only a few hours; by the next day the patient was able to sit out of bed, and the lung signs had disappeared, and on the day following he resumed his work. The urine during the attack was slight in amount, and contained much albumin; the following day it was abundant and contained uric acid crystals and a few casts, but only a trace of albumin. In neither case were there any signs of artero-sclerosis.

Fiessenger explains these cases by a temporary congestion of the kidney, due to vasomotor influence. The congestion, he thinks, causes an œdema of the connective tissue surrounding the interlobular vessels and compresses the afferent vessels of the glomeruli, shutting off their blood-supply. The congestion may be due to a bulbar lesion or the action of unknown toxines.

THE SPINAL CORD IN GRAVE ANÆMIA.

BURR (*University Medical Magazine*, April, 1895) reports the examination of the spinal cord in seven cases of pernicious anæmia and in one of profound anæmia secondary to chronic dysentery. In all but one of the cases of pernicious anæmia there was sclerosis of the posterior columns. The cervical swelling was the seat of the greatest damage, the lesion progressively decreasing in intensity and extent until at the lumbar region it was either absent or extremely slight. The distribution of the changes is given as follows: "The only parts of the cord ever affected are the posterior columns, the lateral columns in and near the crossed pyramidal tracts, the direct pyramidal tracts, and rarely a band running forward along the circumference of the cord (the direct cerebellar tracts). The gray matter is never affected seriously and rarely even slightly. The degeneration of the posterior peripheral roots, when present, is ordinarily so slight as to be of no importance. In the greater number of cases there is marked posterior degeneration with some, but much less marked, degeneration of the lateral columns in and around the crossed pyramidal tracts. The posterior columns may be affected alone, the lateral never alone. Almost invariably there is a band of normal white tissue separating the diseased area in the posterior columns from the gray matter. Not very rarely there are two distinct areas of degeneration in the posterior columns in the cervical region—one in the postero-internal, the other in the postero-external column, the two being separated by a band of normal or almost normal white matter. In the lower dorsal or lumbar cord the most frequent seat is midway between the posterior median longitudinal fissure or septum and the posterior gray matter. Almost always there is normal white matter between the posterior horn and the diseased area in the lateral columns. The lesion is always symmetrical in the two halves of the cord, often absolutely so, but sometimes descending farther on one side than on the other. The degeneration never produces gross deformity, alterations in the shape of the cord. There is never, for instance, shrinking in the posterior columns."

Burr regards the lesion as the effect of a toxæmia similar to the posterior degeneration occurring in pellagra and ergotism. It is remarkable how rarely the lesions are associated with any special symptoms pointing to disease of the spinal cord. The value of the paper is enhanced by a full account of the cases recorded in the literature since Lichtheim called attention to the condition in 1887.

DR. JAMES TAYLOR read a paper at the Royal Medical and Chirurgical Society on the same subject (*Lancet*, March 30, 1895), in which he reported two cases, both of which were somewhat unusual as showing symptoms during life of cord disease. In both cases extensive degeneration was found in the white matter of the cord, the gray matter being unaltered. Dr. Taylor regards the changes as due, in the first place, to sclerosis from small hemorrhages, similar to those occurring in the retina, and, secondly, to changes following upon the blood conditions, as in diabetes and pellagra.

PHYSIOLOGICAL ALBUMINURIA—SO-CALLED.

SPIEGLER (*Wiener med. Blätter*, 1894, No. 38) has examined the urine in a large number of cases with the reagent devised by him (mercuric chloride, 8 gms.; tartaric acid, 4 gms.; glycerin, 20 gms.; aq. destil., 200 gms.) for the detection of albumin. He arrives at the conclusion that albumin is a very frequent, but not a normal constituent of urine, due to certain irritations. "Anything which affects the mental or physical equilibrium may lead to the excretion of traces of albumin," for example, bodily exertion, strong emotions, even moderate consumption of alcohol. All of one hundred cases of scabies showed traces of albumin, as also cases of eczema, presumably on account of the irritation of the skin.

THE EFFECT OF ELECTRIC CURRENTS ON ANIMAL TISSUES.

ESCHLE publishes (*Virchow's Archiv*, Bd. cxxxviii. p. 385) the results of some experiments on the subject indicated in the title. The effects of strong, constant currents were first studied in dead tissues, needle electrodes being used. The changes were most marked at the cathode on account of the violent mechanical action of the liberated hydrogen. Electrolytic experiments were carried out either by passing both electrodes into the various organs, or more frequently by putting one electrode in the organ, the other, a large one, over the surface of the body. No difference could be observed in the action of the two poles. The immediate effect was a local necrosis, followed by extensive inflammatory and degenerative changes. After some days regeneration began. Some organs reacted more strongly than others, the liver showing less change, for example, than the kidneys. By applying galvanic and faradic currents to the skin evidences of inflammation and degeneration were produced in the internal organs.

EXPERIMENTAL MALARIA.

The following conclusions have been drawn from an extensive article by DI MATTEI (*Archiv für Hygiene*, Bd. xxii. Heft 3): Malarial infection can be brought about in men by both intravenous and subcutaneous injection. In the latter case not less than 2 c.cm. of blood should be injected. The time of incubation varies, but is usually between ten and fourteen days. Tertian, quartan, and irregular fevers are due to three different parasites, and the injection of blood containing one variety reproduces the type of the primary case, and with similar organisms in the blood. Inoculation from cases of mixed infection produces correspondingly atypical diseases. If the organisms of one type are injected into the body of a person with a fever of different type, the course of the disease may be changed.

Inoculation with the blood of a malarial man cannot reproduce the disease in a lower animal; all kinds of animals, including monkeys, having been tried. The parasites found by Danilewsky in birds, and claimed by him to be identical with human malarial protozoa, have analogies with the latter, but are essentially different from them. They cannot be grown in the human body; they do not produce similar changes; they are not affected by quinine or arsenic.